ENERGY ANALYSIS OF TURKEY

ANNOTATED OUTLINE:

1. Introduction   
 1.1.Earth’s Resources

1.2.Environmental Impacts

1.3.Energy Policies

1.4.Energy Production

1.4.1. Fossil Fuel Plants  
 1.4.1.1. Coal Plants  
 1.4.1.2. Natural Gas Plants  
 1.4.1.3. Oil Plants

1.4.2. Nuclear Power

1.4.3. Renewables

1.4.3.1.Biomass Energy

1.4.3.2.Geothermal Energy

1.4.3.3.Hydropower  
 1.4.3.4.Solar Energy  
 1.4.3.5.Wind Energy  
 1.5. Transportation Services  
 1.6. Commercial and Residential Buildings  
 1.7. Industrial Sector

1.8. Energy Efficient Technologies

“This section will try to find answers to questions like what is sustainable energy and why is it important for us? It will cover past, present and future of energy production and demand sector by sector. It aims to provide an insight to where we are going and what we need to do”.

2. Energy Policy Analysis of Turkey   
 2.1. Current Conditions of Energy Infrastructure and Natural Resources  
 2.1.1. Energy Management

2.1.1.1.Electricity Generation and Transmission  
 2.1.1.2.Electrical Grid   
 2.1.2.Infrastructure of Natural Resources (Fossil Fuels, etc.)  
 2.1.2.1. Production  
 2.1.2.2. Distribution  
 2.2. Supply and Demand  
 2.3. Key Policies  
 2.3.1.Government Institutions  
 2.3.2.Environmental

2.3.2.1. Environment Climate Change

2.3.2.2. Local Pollution

2.3.2.3. Policies and Measures

2.3.3.Energy   
 2.3.3.1. Policies and Measures  
 2.3.3.1. Fossil Energy  
 2.3.3.2. Renewables  
 2.3.3.3. Nuclear

2.3.3.4. Energy Efficiency

“In this part, I’ll first provide an understanding of current conditions and then I’ll focus on energy and environmental policies of Turkish government. By making a connection between conditions and actions, I’ll justify the reasons behind government policies”.

3. Energy Sector Analysis of Turkey  
 3.1. Fossil Energy  
 3.1.1. Coal  
 3.1.1.1. Supply and Demand

3.1.1.2. Industry Structure  
 3.1.2. Natural Gas

3.1.2.1. Supply and Demand

3.1.2.2. Markets

3.1.2.3. Infrastructure

3.1.2.4. Price and Tariffs

3.1.2.5. Security of Supply   
 3.1.3. Oil   
 3.1.3.1. Supply and Demand

3.1.3.2. Markets

3.1.3.3. Infrastructure

3.1.3.4. Price and Tariffs

3.1.3.5. Security of Supply

3.2. Nuclear Power  
 3.2.1. Activities in Preparation for a Nuclear Programme

3.3. Renewables

3.3.1.Biomass Energy  
 3.3.1.1.Biomass Energy Potential  
 3.3.1.2. Classification of Challenges in Implementing the Technology

3.3.1.2.1. Economic Issues

3.3.1.2.2. Environmental Issues

3.3.1.3. Policies and Measures

3.3.1.4. Future of Biomass Energy

3.3.2.Geothermal Energy  
 3.3.2.1. Geothermal Energy Potential  
 3.3.2.2. Classification of Challenges in Implementing the Technology

3.3.2.2.1. Economic Issues

3.3.2.2.2. Environmental Issues

3.3.2.3. Policies and Measures

3.3.2.4. Future of Geothermal Energy

3.3.3.Hydropower.

3.3.3.1. Hydro Energy Potential  
 3.3.3.2. Classification of Challenges in Implementing the Technology

3.3.3.2.1. Economic Issues

3.3.3.2.2. Environmental Issues

3.3.3.3. Policies and Measures

3.3.3.4. Future of Hydropower  
 3.3.4.Solar Energy  
 3.3.4.1. Solar Energy Potential  
 3.3.4.2. Classification of Challenges in Implementing the Technology

3.3.4.2.1. Economic Issues

3.3.4.2.2. Environmental Issues

3.3.4.3. Policies and Measures

3.3.4.4. Future of Solar Energy  
 3.3.4.Wind Energy

3.3.4.1. Wind Energy Potential  
 3.3.4.2. Classification of Challenges in Implementing the Technology

3.3.4.2.1. Economic Issues

3.3.4.2.2. Environmental Issues

3.3.4.3. Policies and Measures

3.3.4.4. Future of Wind Energy

“In this part, I’ll analyze energy sector part by part. I’ll address strengths and weaknesses of each. I’ll describe the issues getting in the way of development while trying to predict their future”.

4. Energy Research and Development  
 4.1. Government

4.1.1. Institutions   
 4.1.2. Funding  
 4.1.3. Projects  
 4.2. Private Sector  
 4.2.1. Investment  
 4.2.2. Projects

4.3. Universities  
 4.3.1. Education  
 4.3.2. Projects

“Aim of this chapter is to overview the on-going scientific research and development that is led by government, private sector and universities. We would like to see the results of projects and analyze the current condition of our technology.”

5. International Relations and Collaborations  
 5.1. International Organizations  
 5.2. Relations with Neighbour Countries and EU

5.2.1. Turkey’s role as an Energy Corridor  
 5.2.2. Collaborations

“Due it’s location, Turkey is always regarded as the connection between continents of east and west. Having a significant geopolitical importance, Turkey’s energy policy has an impact on the area. In this chapter, I’ll analyze this impact and how the international relations affect it. I’ll overview collaborations and projects with other countries”.

6. Conclusion

6.1. Arguments

6.1.1. Critique  
 6.1.1.1. Policies and Measures

6.1.1.2. Energy Sectors  
 6.1.2. Comparative Analysis

6.2. Recommendations

“I’ll first criticize the current policies, energy sectors then offer solutions and justify my reasons in this final section. I’ll explain how Turkey can be a good model for comparative analysis as compared to some other regions in the world, what makes Turkey different, what are the resources that can be leveraged”.